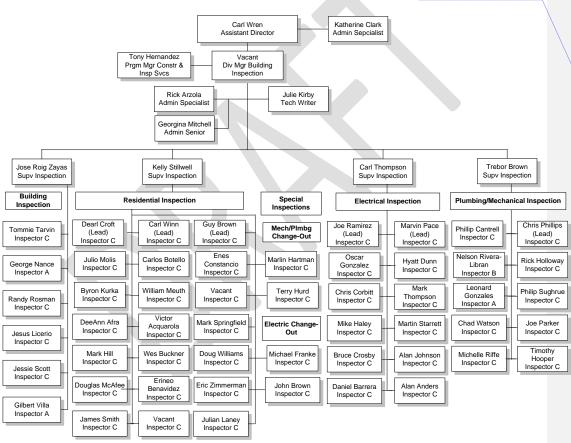
I. BUILDING INSPECTION

A. PROFILE

Organization

The organization for the Building Inspection Division is shown in Figure __. The positions and functions are shown in Table __.

Figure 33
Organization of Building Inspection Division



Comment [MM[1]: The font size used throughout this chapter seems smaller than other chapters. Martinez.

Comment [MM[2]: We recommend an introductory paragraph on Building Inspections like all the other chapters ALL

Comment [WC3]: It may not be a major issue but this organization chart is already out of date. Wren/Roig Suggest using disclaimer statement on all organizational charts and employee listings.

Comment [MM[4]: Please note throughout this chapter and others that Carl Wren, Assistant Director is now the City of Austin Building Official.

Table Positions and Functions of Staff in Building Inspection Division

| Position Title | Number of Positions | Responsibilities | Reports To | | |
|--------------------------------------|--|--|--------------------------------------|--|--|
| Assistant Director/Building Official | 1 | Manages Building Inspection, Commercial Building Review, Permit Center, Residential Review, Site/Subdivision Inspections | Director | | |
| Div Mgr. Building Inspection | 1 | Manages the Building Division | Assistant Director/Building Official | | |
| Progm Mgr. Constr & Inspe.Svcs | 1 | Ensures compliance with Codes and resolves customer complaints, Assists Division Manager | Div Mgr. Building Inspection | | |
| Admin Specialist | 1 | Provides administrative support to Division staff | Div Mgr. Building Inspection | | |
| Admin Senior | 1 | Provides administrative support to Division staff and acts in lead capacity | Div Mgr. Building Inspection | | |
| Tech Writer | 1 | Develops materials for publication and creates and distributes detailed activity reports | Div Mgr. Building Inspection | | |
| Building Inspection | | | | | |
| Supr. Inspection | 1 | Supervises day-to-day activities of Commercial Building Inspectors Section | Div Mgr. Building Inspection | | |
| Inspector A | 2 | Entry level Building Inspector performs basic building inspection activities | Supr. Inspection | | |
| Inspector C | 4 | Building Inspector performs building inspections on more complex projects based on job experience and attainment of nationally recognized certifications | Supr. Inspection | | |
| Residential Inspect | Residential Inspection and Special Inspections | | | | |
| Supr. Inspection | 1 | Supervises day-to-day activities of the | Div Mgr. Building | | |

| | Number | | | |
|--------------------------------|-----------|---|--------------------|--|
| | of | | | |
| Position Title | Positions | Responsibilities | Reports To | |
| | | Residential Combination Inspectors Section | Inspection | |
| Residential Inspec | tion | | | |
| | | Combination Inspector performs building, | | |
| | | plumbing and mechanical inspections on one | | |
| | | and two family residential projects. Inspectors | | |
| | | must possess both Texas Inspector Licenses | | |
| | | and other related nationally recognized | | |
| Inspector C | 21 | certifications | Supr. Inspection | |
| Special Inspections | s | | | |
| Mech/Plmbg Chang | g-Out | | | |
| | | Provides inspections for water heater change | | |
| Inspector C | 2 | outs on an appointment only basis | Supr. Inspection | |
| Electric Change Ou | ıt | | | |
| | | Provides inspections for electrical change outs | | |
| Inspector C | 2 | on an appointment only basis | Supr. Inspection | |
| Electrical Inspection | on | | | |
| | | Supervises day-to-day activities of the | Div Mgr. Building | |
| Supv. Inspection | 1 | Electrical Inspectors Section | Inspection | |
| | | Performs electrical inspections of both | | |
| | · · | residential and commercial projects. Must | | |
| | | possess Texas State Inspector License with | | |
| | | experience as Journeyman or Master | | |
| Inspector C | 12 | Electrician | Supv. Inspection | |
| Plumbing/Mechanical Inspection | | | | |
| | | Supervises day-to-day activities of the | Div Mgr. Building | |
| Supv. Inspection | 1 | Plumbing/Mechanical Inspectors Section | Inspection | |
| | | Entry-level Plumbing/Mechanical Inspector | | |
| Inspector A | 1 | may not have attained required Texas State | Supv. Inspection | |
| mopodol / t | • | Plumbing Inspector License. Performs | Cap I. Inoposition | |

Comment [MM[5]: Delete Line. Martinez

Comment [MM[6]: Jose Roig is now the Deputy Building Official

| Position Title | Number of Positions | Responsibilities | Reports To |
|----------------|---------------------------|---|------------------|
| | | inspections on less complicated projects | |
| Inspector B | 1 | Plumbing/Mechanical Inspector with intermediate level of experience and certifications | Supv. Inspection |
| Inspector C | 8 | Plumbing/Mechanical Inspector with highest levels of State Licenses and national certifications assigned to most complex commercial and large residential projects | Supv. Inspection |

B. Positive Findings

- City pays for <u>Inspector's Inspection and Plan Review</u> certifications, renewals and required training;
- City tracks status of employee certifications to ensure CEUs are earned to qualify for certification renewals;
- Inspection Sections place emphasis on achieving State and National Certification to demonstrate competency;
- City has adopted a visit-ability requirement for new residential construction that will enhance accessibility for the expanding disabled community;
- The City utilizes technology to enhance inspector productivity by sending their daily inspection workload electronically to their field computers and thereby avoiding the need for every inspector to come to the main office to receive their daily assignments;
- City has adopted a Registered Industrial Plant Program that allows qualifying facilities to avoid need to obtain permits for work that is inspected by an in-house certified electrical inspector;
- The Inspection Sections Supervisors (Residential and Commercial) receive comprehensive weekly and monthly activity reports that measure performance against established standards. Great emphasis is placed on tracking ability to meet expectation of providing next day inspection;
- Customers can use either the City's Interactive Voice Response (IVR) system or an on-line approach to request inspections. A customer instruction page has been provided on the Department web site;

Comment [MM[7]: This chapter does not include plan review
Might want to consider adding bullets:
City pays skill-based pay to building inspector's for certifications.
Residential inspectors are cross-trained in 4 disciplines and perform combination inspections.

Comment [WC8]: I would recommend wording this sentence to read as follows: "..on achieving State licenses and nationally recognized certifications..."

Comment [PZ9]:

Comment [PZ10]:

Comment [PZ11]:

Comment [PZ12]: I

- The Commercial Inspections Division has created numerous flow-charts that serve as checklist for inspectors to use to confirm they are performing a comprehensive inspection in the field; and
- Inspectors can e-mail correction notices to contractors while still in the field.

C. ORGANIZATION ISSUES

Boards and Commissions

The Building Inspection Division provides support to the Building and Fire <u>Code</u> Board of Appeals, the Electric Board and the Mechanical, Plumbing and Solar Board. The description of each of these Boards and our specific recommendations are provided under the Boards and Commissions section of the report. In summary, we believe the three Boards should be consolidated and the language in the adopting ordinances and by-laws be updated to reflect these changes.

Under the new City structure discussions are underway to merge these three Boards and we are highly supportive of this approach. As part of this study we did interview the chairperson of each Board. Based on our review we suggest:

1. Recommendation: Combine the Building and Fire Board of Appeals, the Electric Board and the Mechanical, Plumbing and Solar Board.

Inspector Office Space

The Department has taken a very progressive approach in improving the overall effectiveness of the inspection program by increasing the amount of field time available to the inspectors. Through the use of technology, inspectors are not required to drive to the main office every day in order to retrieve their daily inspection workload. The inspector's daily inspection schedule is sent to their field computers electronically and is immediately available to them upon their arrival at the various sites where the City inspection vehicles are stored overnight. This process allows inspectors to park their vehicles within or near their assigned inspection districts, which increases the amount of time the inspectors may spend within their assigned inspection district. This arrangement also dramatically reduces the morning and afternoon competition for parking spaces between customers and inspectors at the main office and also eliminates the need to provide a large office space that would have been otherwise required for all inspectors to gather at once to receive their inspection schedules. Under this arrangement individual field inspectors are only required to come to the main office one morning a week to meet with their supervisor.

Given that each inspection group only comes to the main office once per week for a one-hour group meeting, we were surprised to find that the inspector's area contains numerous work cubicles equipped with desks, computers and landline phones. Interviews with staff revealed that these spaces are rarely utilized. We recommend that those

Comment [WC13]: Staff can understand the potential value of this recommendation and with the expansion of boards and commissions to 11 members the appointments to these boards and commissions may provide opportunities to include all of the needed expertise, but it is our understanding that the majority of the members of the technical boards do not want to see their respective boards combined. Wren/Roig

cubicles be removed and a more open floor plan be created that would better serve the needs of a single inspector group gathering for a one-hour morning meeting. This type of remodel should free up space that could be used to provide better office configurations for the staff that is assigned full-time to the main office and provide a private conference room that could be utilized by supervisors when confidential meetings are required.

2. Recommendation: The Inspector's office space should be remodeled to eliminate the individual cubicles that are rarely used and replaced with an open floor plan that better accommodate group meetings. It should include appropriate office spaces for all inspection staff assigned to the main office and a private conference room.

Job Descriptions

The City of Austin has chosen to establish minimum inspector certification requirements by incorporating them into the Municipal Code. Nationally the practice has been to identify these minimum requirements in the approved individual job descriptions that are readily accessible on the jurisdiction's website. This practice makes it much easier for potential job applicants to identify the minimum job requirements and also makes the process of modifying job descriptions less burdensome than adopting new ordinance language.

3. Recommendation: The Building Official should relocate the minimum inspector qualifications from the adopted ordinances and place them in the approved job descriptions.

-Several sections of the Municipal Code establishes minimum qualifications for inspector positions that are inconsistent with national best practices. Examples include requiring a minimum of (1) one year of experience as a supervisor prior to appointment as a Residential Building Inspection Supervisor or as a commercial mechanical inspector. A literal reading of these requirements would necessitate that an existing employee must leave the City to obtain a supervisory role in another jurisdiction before they could qualify to be promoted in the City of Austin. This language precludes an existing employee from being promoted from within the organization. It may have been the intent of the authors of this language to require that a prospective supervisor have actual supervisory experience while they worked in the private sector, but that approach works to the disadvantage of existing employees who did not come to the City with prior supervisory experience.

4. Recommendation: The Building Official should review the Municipal Code and remove any references to the need for prior supervisory experience in order to be hired as a supervisor or entry level inspector.

Comment [WC14]: Staff agrees with this recommendation but there is no obvious source of funding to allow us to make this happen. Wren/Roig

Comment [WC15]: I agree that the minimum certifications and licenses should be clearly identified in the job descriptions. This will require Corporate HR support since the inspector job descriptions were written to be applied generically. If removed from the code, the qualifications could and should also be dealt with in departmental policies as well as in the job descriptions in the event there is a move to utilize more third party inspectors. Wren

Comment [WC16]: The current job descriptions for inspector positions include both building inspectors and utility/infrastructure inspectors and to fully apply this recommendation would require Corporate HR approval to develop separate specific job descriptions for each type of inspection position. We recommend that these qualification be removed from future code adoption ordinances and placed in the Building Criteria Manual if separate job descriptions cannot be developed. Roig/Hernandez

Comment [WC17]: We agree with this recommendation, at least in concept. Some level of training or experience is needed to properly supervise the work of others. This might be acquired by attending the Supervisor Academy or the City's LEAPS program. Wren/Roig/Hernandez

Performance Standards

The Table below includes those items the Department currently considers performance standards for the Inspections Group. Our review of these "Standards" suggests that most of the identified measures are in fact simply measurements of activity levels. The exception to this statement is the performance standards to provide next-day inspections a minimum of 90% of the time and the failure rate for residential inspections. While the other information on the table provides useful insights regarding potential trends in activity levels, they don't actually represent performance standards. These "standards" should be replaced with performance standards that are more indicative of the desired level of service to be achieved. While the performance standard for next-day inspections should be retained, additional standards should be added that monitor the quality of inspection services being provided. Such standards should include the results of customer satisfaction surveys, the frequency and results of a supervisor audit program and the percent of staff fully certified to perform their assigned inspection duties.

Table
Performance Standards For Building Inspection

| One Stop Shop | 2011 | 2012 | 2013 | 2014 | 2015 |
|--|---------|---------|---------|----------------|---------|
| FTEs | 51 | 51 | 60 | 60 | 60 |
| Citywide Cost per inspection | \$31.12 | \$28.07 | \$26.66 | Not tracked | |
| # of inspections | 161,519 | 186,737 | 220,881 | 228,314 | 230,000 |
| # fire technical inspections | 7,645 | 9,633 | 10,636 | 10,945 | 10,500 |
| # initial food establishment inspections | 402 | 493 | 491 | 607 | |
| % building inspections performed within 24 hrs. of request | 94% | 94% | 91% | 91% | 90% |
| % residential inspections that fail | 24% | 24% | 26% | 26% | |

The Building Inspection Section has placed great emphasis on having the inspectors meet their established performance standard of providing next-day inspections. Each inspector's ability to provide the inspection on the day requested is tracked on both an individual basis and for the Section as a whole. The records provided to us indicate they are able to achieve this performance standard in excess of 90% percent of the time. We

strongly support management's commitment to providing next day inspections and their dedication to tracking and reporting this information.

While we support the establishment of next-day inspection as a performance standard, without also considering the importance of maintaining quality standards, the intense focus on meeting this single performance standard can overshadow other important goals of the Department. The need for a comprehensive supervisor-auditing program as a means of ensuring that inspection quality does not suffer is discussed elsewhere in this report.

The supervisors currently assigning the daily workloads for the inspectors have appeared to establish the number of inspections a specific inspector can consistently complete within their daily available work hours. Meeting the next-day inspection standard does not, however, give any indication of the quality of inspections being performed by individual inspectors. This arrangement lends itself to assigning fewer inspections to poorly performing inspectors and loading up inspections on highly efficient inspectors. At the end of the day it appears that all inspectors are working efficiently and meeting their performance standards when in fact, some poor performing inspectors are simply being accommodated by reducing their daily workload. The performance standards established by the Inspection Section should be expanded to include not only quantitative measures but also measures to confirm quality of inspections. Such measures could include not exceeding a specified number of deficiencies observed by supervisors during field audits and achieving a high level of customer satisfaction as reflected on customer comment surveys that are mailed to contractors after jobs have been completed.

5. Recommendation: The Building Official should augment the current qualitative performance standards for next-day inspections with an qualitative standard to ensure quality inspections.

The other actual inspection related performance standard that the Department is tracking is the failure rate for residential inspections. This rate is higher than we have seen in other jurisdictions and is increasing over the last several years. A high rate of failed inspections has a significant impact on staff resources because it requires staff to revisit the site on some future date. While it is not possible to eliminate all failed inspections, when the failure rate reaches these levels then some effort should be applied in determining the source of these failures. It has been reported by staff and customers that one source of these failures is the practice of contractors calling for an inspection prior to the work being ready for inspection because the contractors anticipate they will not actually receive the inspection on the day they requested it. By doing so, they are virtually guaranteed to receive the inspection within 48 hours of their request. It is reported that this practice originated during a period of time when the City was experiencing difficulty in meeting their next-day inspection performance standard. It is also reported that contractors that engage in this practice are not routinely penalized through the assessment of additional re-inspection fees. Based on a review of the City reports from AMANDA,

Comment [WC18]: Staff does not believe this is a true statement. Inspectors that are not yet fully trained (those in the process of being trained) are the only inspectors not assigned to an area and cannot yet perform all of the various inspections (e.g. inspectors who are not yet licensed as plumbing inspectors cannot be assigned to do plumbing inspections). Roig

Comment [WC19]: I generally agree with this recommendation, though I need to have more time to work with staff to establish minimum quality standards and an oversight process. Wren

Comment [WC20]: Managers and supervisors report that they have tried to do follow up inspections to assess quality but that this has been almost impossible to accomplish due to limited staff and the increasing time demands of a robust construction industry. Wren

customers should be able expect that their inspection request will be honored at least 90% of the time. Allowing this practice to continue also creates the appearance of a system that rewards contractors that violate the spirit of the inspection request process and penalizes other contractors by not allowing them to receive their inspections because their assigned inspector is "tied-up" on jobs that are not ready.

Recommendation: The Building Official should encourage the assessment of re-inspection fees on residential projects that demonstrate a pattern of calling for inspection before the work is completed.

Staffing Levels

The tables and figures below indicate the inspection activity levels for the last seven (7) years. These tables are specific to each inspection group and reflect considerable variation between the groups. We generally find that a range of between 10 and 15 inspections per day per inspector provides sufficient time for inspectors to perform quality inspections and still participate in meetings and training classes. There are factors that can influence this range either up or down. These factors can include excessive travel time, complexity of projects to be inspected and the method used to count the inspections. Given that the City of Austin has implemented a program to have inspectors park their vehicles at various off-site locations in general proximity to their inspection districts and that the inspectors only come to the main office once per week we do not believe excessive travel time isn a significant factor.

Many jurisdictions simply count the number of stops (construction address) assigned to an inspector, while Austin counts the number of inspections performed including when multiple inspections are performed at a single location. For example a framing inspection request for combination inspectors can result in counting three (3) inspections for that single stop (Ex: framing, rough plumbing and rough mechanical inspection). While there is nothing inherently wrong with this approach, and in fact it highlights the benefit of having a combination inspector program by allowing a single inspector to perform more than one type of required inspection on the site, the counting method needs to be factored into the overall target number. This way of counting would tend to increase the amount of daily inspections that are reasonable. This affect is offset somewhat for the combination inspections because these inspectors are also expected to perform a level of plan review in the field that we have not observed in other jurisdictions. With this additional burden for performing plan review in the field it should be expected that the number of quality inspections that can be performed per day would be in the lower range of our recommended inspections per day. A review of monthly inspection data provided to us indicated a range from a high of 28.9 for Residential Combination Inspectors to a low average of 12.3 for Commercial Mechanical. It should be noted that these numbers were generated based on a total of 249 business days per year (accounting for holidays). Our recommended range of inspections per day per inspector is consistent with our use of this method in other jurisdictions nationally.

Comment [WC21]: Staff agrees with this comment, at least in concept. The challenging part of this recommendation is at what point does Zucker Systems believe this should be done. Should we assess the re-inspection fee following the first failed inspection? A slightly greater level of detail in this recommendation would be helpful in implementing it. Wren/Roig

Table Residential Combination Inspections

| Residential | Avg. Insp/Month | FTEs | Avg/lnsp/Day/Inspector |
|-------------|--------------------|------|------------------------|
| FY 07-08 | 114,160 | 22 | 20.8 |
| FY 08-09 | 88,040 | 19 | 18.6 |
| FY 09-10 | 71,655 | 12 | 24.0 |
| FY 10-11 | 86,295 | 12 | 28.9 |
| FY 11-12 | 99,774 | 17 | 23.6 |
| FY12-13 | 115,393 | 17 | 27.3 |
| FY 13-14 | 115,138 | 16 | 28.9 |

From the table above it is clear to see that the average number of inspections performed per inspector per day is substantially above the range we have recommended for other jurisdictions in the past. Current staffing (16) is also significantly below the number of inspectors (22) available during the City's previous peak period of FY 07-08, which was prior to the implementation of many new code requirements. To bring the average number of inspections per day per inspector in alignment with our traditional recommendation would necessitate nearly doubling the number of existing residential combination inspectors. This level of increase appears to be excessive given the historical staffing levels maintained in the group. A more reasonable approach would be to add ten (10) additional positions at this time and then closely monitor the activities of this group to confirm that both qualitative and quantitative performance standards are being achieved. Adding these additional positions would bring the average number of inspections per day per inspector to 17.8. While this number is still above our recommended range of 10 to 15, we believe this variance is an appropriate response to reflect the efficiencies gained by utilizing a combination inspection program. The addition of ten (10) combination inspector positions should be accompanied by the addition of two (2) first-line supervisor positions in order to maintain an adequate span of control. This would be particularly important given the anticipated close supervision that should be afforded new employees. While we are recommending a total of ten (10) additional combination inspectors be hired to reduce the average number of inspections per day per inspector to be consistent with what we believe are best practices observed in other jurisdictions. We also recognize that doing so would have a significant impact on the operations. We therefore recommend that the process of adding additional combination inspection staff and supervision be approached a two-phase project. The initial phase would be to add there (3) combination inspectors and a supervisor. Once these additional inspectors have been successfully trained and incorporated into the daily

Comment [MM[22]: This table does not reflect combination inspections done at a single site, nor multiple inspections at a single site. It's not easy to identify the # of inspections conducted at each stop. We are currently not able to capture this data in AMANDA

Comment [MM[23]: Is it relevant to reference activities for FY07-FY08 here and in table above?

Comment [WC24]: The number of inspectors was previously reduced to 16 for a time but the FTEs have been reinstated. Residential Inspections currently has 22 inspector positions and 1 supervisor for a total of 23 FTEs. Of those FTEs are 2 assigned to the change out program (water-heaters and HVAC units) and schedule their workload by appointment. One FTE is assigned to assist the supervisor in the office, and of the remaining 19, only 13 are fully qualified to do combination inspections, and 6 are still in training. Jose

Comment [PZ25]:

inspection scheduling then it will be possible to make a much more accurate evaluation of the impact of these additional resources on the Division's operations and the potential need to hire additional staff.

- 7. Recommendation: The Building Official should hire the equivalent of three (3) additional Combination Residential Inspectors and one (1) supervisor as part of a multiphase staffing augmentation program.
- 8. Recommendation: After hiring the first phase of additional combination inspectors, the Building Official should evaluate the need to hire additional combination inspectors and a supervisor in order to improve quality and training and reduce daily workload to an acceptable level.

A practice we see successfully implemented in other jurisdictions experiencing increased workload is the use of contract staff. We support this practice because it allows jurisdictions to quickly react to changing staffing needs and reduces the turmoil associated with the practice hiring full-time staff and then quickly laying them off. It also gives management the opportunity to more accurately evaluate the likelihood of whether a current spike in workload activity will be sustained for an extended period in the future. Another benefit that jurisdictions have received by initially utilizing contract staff is they have an opportunity to evaluate the quality of work provided by the contract staff. Many time well-qualified contract staff ultimately becomes successful full-time employees of the jurisdiction. Use of qualified contract staff can also provide welcomed relief for those current inspectors and supervisors who are tasked with the on-going responsibility to both perform inspections and train new staff.

See Recommendation 49 in Chapter II where we recommend use of additional staff or consultants as necessary to meet performance standards.

A review of the inspection history for the remaining groups (Electric, Commercial Building, Commercial Mechanical and Commercial Plumbing) indicates that they have been able to respond to inspection requests within the established performance standards by adjusting staffing levels in proportion to the increase or decrease in annual inspection requests and the use of overtime/comp time. The current staffing levels for these groups seems to be appropriate to meet the next day inspection standard, however, as the Section places more emphasis on enhancing uniformity and consistency among the inspector ranks it may be necessary to add additional staff to compensate for the lost field time dedicated to additional training.

Table Electric Inspections

| Electric | Total Inspections | FTEs | Avg/lnsp/Day/Inspector |
|----------|----------------------|------|---|
| Electric | inspections | LIE2 | Avg/iii <mark>s</mark> p/Day/iiispector |

Comment [WC26]: We agree with this comment because these additional FTEs would allow us to have sufficient time to train new hires without negative impacts to productivity and quality. For example, if we had an additional 3 fully qualified inspectors, the time lag of training our 6 new inspectors and the impending retirement of an additional residential inspector could be more easily absorbed. Wren/Roig

Comment [WC27]: We believe there is already a need for at least one, and possibly 2, new supervisors since the current supervisor has a total of 22 direct reports which far exceeds a reasonable span of control.

Wren/Roig

Comment [MM[28]: Recommend you provide a brief summary of #49. A reader may not have Chapter II with them when reading this chapter.

| FY 07-08 | 45,002 | 12 | 15.1 |
|----------|--------|----|------|
| FY 08-09 | 38,157 | 10 | 15.3 |
| FY 09-10 | 33,316 | 10 | 13.4 |
| FY 10-11 | 35,644 | 10 | 14.3 |
| FY 11-12 | 40,786 | 11 | 14.9 |
| FY12-13 | 48,067 | 12 | 16.1 |
| FY 13-14 | 53,429 | 14 | 15.3 |

Table Commercial Building Inspections

| Commercial Building | Total Inspections | FTEs | Avg/lnsp/Day/Inspector |
|------------------------|----------------------|------|------------------------|
| FY 07-08 | 26,137 | 6 | 17.5 |
| FY 08-09 | 21,174 | 6 | 14.2 |
| FY 09-10 | 21,005 | 6 | 14.1 |
| FY 10-11 | 19,124 | 6 | 12.8 |
| FY 11-12 | 17,806 | 6 | 11.9 |
| FY12-13 | 24,519 | 6 | 16.4 |
| FY 13-14 | 25,888 | 7 | 14.9 |

Table Commercial Mechanical Inspections

| Commercial Mechanical | Total Inspections | FTEs | Avg/lnsp/Day/Inspector |
|--------------------------|----------------------|------|------------------------|
| FY 07-08 | 14,922 | 4 | 15.0 |
| FY 08-09 | 9,133 | 3 | 12.2 |
| FY 09-10 | 7,406 | 3 | 9.9 |
| FY 10-11 | 7,387 | 3 | 9.9 |
| FY 11-12 | 7,536 | 4 | 7.6 |
| FY12-13 | 11,071 | 4 | 11.1 |
| FY 13-14 | 12,209 | 4 | 12.3 |

Table Commercial Plumbing Inspections

| Commercial Plumbing | Total Inspections | FTEs | Avg/lnsp/Day/Inspector |
|---------------------|----------------------|------|------------------------|
| FY 07-08 | 22,250 | 8 | 11.2 |
| FY 08-09 | 21,350 | 8 | 12.1 |
| FY 09-10 | 16,846 | 7 | 10.9 |
| FY 10-11 | 18,017 | 7 | 11.7 |
| FY 11-12 | 19,956 | 5 | 18.1 |
| FY12-13 | 21,475 | 6 | 16.3 |
| FY 13-14 | 22,938 | 6 | 15.4 |

Table
Total Commercial Inspections

| Total Inspections | Total Inspections | FTEs | Avg/Inp/Day/Inspector |
|----------------------|----------------------|------|-----------------------|
| FY 07-08 | 222,471 | 52 | 17.2 |
| FY 08-09 | 177,854 | 46 | 17.6 |
| FY 09-10 | 150,228 | 38 | 18.0 |
| FY 10-11 | 166,467 | 38 | 19.9 |
| FY 11-12 | 185,858 | 43 | 19.6 |
| FY12-13 | 220,525 | 46 | 21.8 |
| FY 13-14 | 229,602 | 47 | 19.6 |

It is recognized that the process of adding new staff can be very burdensome for existing staff and generally has a negative impact on the group's ability to continue to respond to an increased workload. This impact will continue through not only the actual hiring process but last until the new employee is deemed fully capable of performing the full range of inspections appropriate for the position. Frequently this ride-along training process can take up to a year or more. During this period the City not only does not have the benefit of a fully trained new employee but the effectiveness of the Inspector assigned the training role is also reduced. Many jurisdictions have recognized and addressed these challenges by temporarily employing qualified contract staff or by bringing back recently retired employees on a part-time temporary basis until the new staff has become fully trained. This approach helps ensure that the existing inspection workload is being addressed and helps avoid employee burnout for those individuals tasked with the responsibility to complete both their daily inspections and to train new employees.

9. Recommendation: The Department should temporarily hire qualified contract inspectors and recently retired inspectors to perform routine inspections while new inspectors are being hired and until they are fully trained.

D. POLICY ISSUES

Code Adoptions

Unlike many other states, the State of Texas does not mandate local jurisdictions adopt and enforce a specific set of construction codes. This list of adopted codes generally represents the most current editions of the nationally recognized codes. The Department should be commended for adopting the current set of codes. While we generally recommend that jurisdictions adopt a set of Codes that utilize a process that helps assure compatibility among the Codes, the political forces present in Austin has led to an approach that incorporates codes adopted by both the International Code Council (ICC) and the International Association of Plumbing and Mechanical Officials (IAPMO). In some cases trade codes published by both organizations have been adopted in order to fully address the types of projects that Austin routinely reviews. We also encourage jurisdictions to minimize the number of local amendments that they incorporate into their local code adoption process. We feel that the existence of a large number of local amendments helps contribute to confusion on the part of both designers and contractors. As Austin continues to compete to attract world-class development, the need for designers to comply with both a combination of national codes and a large volume of local amendments might be considered as a disincentive for some nationally recognized design firms to participate in design competitions in Austin. In addition, contractors working in multiple jurisdictions in the region are placed under an additional burden to know and apply these differing regulations based on which jurisdiction they have chosen to build in.

Those Codes adopted with amendments by the City of Austin include the following:

- International Building Code, 2012 Edition (ICC)
- International Residential Code, 2012 Edition (ICC)
- International Existing Building Code, 2012 Edition (ICC)
- International Plumbing Code, 2012 Edition (ICC)
- International Mechanical Code, 2012 Edition (ICC)
- International Fuel Gas Code, 2012 Edition (ICC)
- International Property Maintenance Code, 2012 Edition (ICC)
- Uniform Mechanical Code, 2012 Edition (IAPMO)

Comment [WC29]: We need more clarity in the text of this recommendation. Do you mean that we should be hiring temporary employees, that we should contract with a third party inspection firm, or some combination of these options. Staff members reportedly are not supportive of using contract firms. Roig

- Uniform Plumbing Code, 2012 Edition (IAPMO)
- Uniform Solar Energy Code, 2006 Edition (IAPMO)
- International Energy Conservation Code, 2012 Edition (ICC)
- National Electrical Code, 2011 Edition
- 10. Recommendation: The Building Official should adopt the International Code Council set of national codes in order to achieve a more harmonized set of codes.
- 11. Recommendation: The Building Official should work to eliminate existing local code amendments whenever possible.

Expired Permits Program

The City of Austin has implemented a very comprehensive program to identify properties with expired permits. While we support the need for obtaining permits for construction projects, it appears to us that the City of Austin has taken the obligation to resolve all expired permits to a level that we have not seen anywhere else in the country. Comments from customers and staff reveal that frequently the existence of an expired permit does not become known until the customer is ready to obtain a new permit for unrelated work. In many cases these expired permits are decades old and have little or no impact on the life safety of those individuals utilizing the property. Resolving these expired permits usually requires a very large expenditure of resources on the part of City staff and the applicant. When a life safety issue has been previously identified through code enforcement action we agree it is appropriate that the City focus resources as necessary to resolve the outstanding life safety issues. Many jurisdictions will have the existence of these violations also recorded in the County Recorder's Office so that the issue can be identified during routine Title searches. However, for the very large proportion of expired permits that do not represent a life safety concern we question if resolving these minor permits represents an efficient use of City resources. Many jurisdictions we have studied do not have any follow-up program for expired permits while others send notification letters alerting customers of the pending expiration of their permit. In other cities the field inspectors are provided with lists of properties that have permits nearing expiration and are assigned to incorporate these properties into their daily inspection schedule. These inspections are treated similar to their other inspection requests and contribute to identifying the average number of inspections performed per day per inspector so they can be considered in determining appropriate staff levels. These jurisdictions believe they have satisfied their obligation by providing these notices. They cite the language in the adopted Codes that clearly place the obligation for calling for inspections on the permit holder rather than the jurisdiction. In those cases where the City believes there is a pattern by a contractor of not calling for final inspections and that such a practice jeopardizes the public welfare then the City may choose to utilize the capabilities of the AMBER program to identify these repeat offenders. Such offenders could be notified by mail and,

Comment [WC30]: Staff is in general agreement with this recommendation. Wren

Comment [WC31]: It is not likely that staff will be able to eliminate all local amendments but we are in general agreement with the intent of this recommendation. Wren

Comment [WC32]: To our knowledge there is no record of code violations with the County and we are not aware of any significant effort to identify code violations or outstanding permits during title searches. We often encounter home owners who have purchased a house without knowing the permit background. Wren

Comment [WC33]: Staff is in general agreement with this statement. However, apart from an evaluation by staff, there does not seem to be a methodology for reliably determining whether expired permits actually represent a hazard to life or health. Wren/Roig

Comment [WC34]: PDRD has begun an analysis of expired permits and permits that are likely to expire in the near future in order to determine whether it is reasonable to pursue them and whether a request for resources to address such permits would be reasonable for the FY2016 City budget.

Comment [WC35]: Do you mean "AMANDA" here?

if they fail to address the outstanding permits, they could be referred to the appropriate State Licensing Board for potential disciplinary action.

- 12. Recommendation: The Building Official should reevaluate the existing expired permit program and redirect resources to only those projects with outstanding life safety issues.
- 13. Recommendation: The Building Official should have staff identify projects with expired permits that represent life safety concerns and have those concerns recorded against the property.
- 14. Recommendation: The Building Official should assign inspectors to conduct site visits on projects with current permits that are approaching their expiration date.
- 15. Recommendation: The Building Official should treat expired permit inspections similar to other inspections for the purpose of establishing minimum required staffing levels.

Another area to consider for revision in the current permit expiration program is the timelines established in the adopted codes that trigger expiration of the permit. Other jurisdictions that have been faced with a high workload associated with monitoring expired permits have chosen to modify their code language. Rather than have permits expire when no activity has transpired on the project for 180 days, they have extended this provision to 365 days prior to expiration. This has reduced staff's workload and there have been no reports that this change has created any significant fire and life safety problems.

16. Recommendation: The Building Official should modify the Code to extend the period that a permit can remain active to 365 days without inspection rather than the current 180 days.

Special Inspections

The City of Austin has adopted Chapter 17 of the International Building Code covering Special Inspections and Testing. While the term special inspection as it applies to Austin covers inspections for electrical change-outs and water heater change-outs, in most other jurisdictions the term "special inspections" refers to inspections performed by highly qualified inspectors who observe and test the placement of specialized structural components during construction. Examples of these components include the placement and testing of high-strength concrete, structural steel welding and certain types of masonry and prefabricated wood components. Third-party inspectors who have demonstrated their competence through achieving nationally recognized certifications in the field for which they are assigned to inspect perform these inspections. Given the quantity and type of large commercial construction projects under construction in the

Comment [WC36]: Regarding both recommendation 12 and 13, staff is working with Austin Code Department to try to analyze the extent and severity of risk from expired and expiring permits. However, it is unlikely that current staffing levels within PDRD can provide the necessary resources to complete this task and maintain a reasonable level of control over the problem in the future. Wren

Comment [WC37]: I am in agreement with this recommendation but it does not appear that current staffing affords us the resources to implement it. Wren

Comment [WC38]: I am in agreement with this recommendation but it is not clear that Council will support funding the staffing levels that might be indicated by it. Perhaps this type of effort could be attempted during slow periods should building construction slowdown in the City of Austin. Wren

Comment [WC39]: This change in permit period has been recommended by Director of PDRD and local stakeholders and will be given serious consideration in our efforts to adopt the 2015 family of codes. Wren

Comment [WC40]: We need to revise our current language to avoid confusion and clearly separate change-out inspections from special inspections for such concerns as structural components, fire stop seals and penetration seals. Wren

City of Austin it must be assumed that there is a large demand for these types of inspections.

Communities with substantial commercial construction typically have a section of the building department assigned to ensure that special inspections are being properly performed. Employees in this section would monitor the work of the approved Special Inspectors and initiate appropriate disciplinary actions when their work does not meet minimum standards. Employees in this section typically have experience and certifications in the specialized fields and the section is under the supervision of a qualified engineer. Staff interviews failed to reveal the existence of this type of special inspection monitoring program. Examples of highly respected Special Inspection Programs include Clark County, NV, Phoenix, AZ and Kansas City, MO. The building Official should contact these jurisdictions to gain an understanding of the scope and effectiveness of their programs.

17. Recommendation: The Building Official should establish a program to monitor the effectiveness of third-party Special Inspectors assigned to projects in Austin.

E. PROCESS ISSUES

Electrical Inspections of Utility Services

Employee surveys and our interviews with staff identified a high level of concern about the current practice of directing Department Electric Inspectors to perform inspections based on criteria established by staff from Austin Energy and not contained within the City's adopted provisions of the National Electrical Code. Some staff comments suggested that they are uncomfortable in conducting these types of inspections due to lack of training specific to those types of distribution related installations and concern about their authority to perform such inspections. We are not in a position to provide specific recommendation on resolution of this conflict, but we do believe that it needs to be brought to the forefront so that appropriate management staff can develop a procedure that adequately addresses all parties concerns. It is our understanding that the Electric Board may have been reviewing this issue within the last twelve months.

18. Recommendation: The Chief Electrical Inspector should meet with Austin Energy staff to discuss and resolve inspector concerns about inspecting per utility standards. This should be memorialized in a MOU.

Field Inspector Computers

We believe it is essential for field inspection staff to have real-time access to the permit system database via wireless connections between their field computers and the permit system server. Having reliable access to permit and inspection information allows the inspectors in the field to easily adjust their inspection schedules to respond to changing Comment [WC41]: Can you be more specific as to how this program would work? Staff members believe we need to tighten up requirements to ensure that we receive documentation of the qualifications of third party inspectors to perform the specialty inspections that they do for construction projects in Austin. The City of Austin does not currently contract with any entities for third party inspections. These inspections are contracted for by the construction GC or the design professionals of record. Wren/Roig

Comment [WC42]: Staff members agree with this recommendation. With a new assistant director on board who can support the chief electrical inspector in such meetings and discussions, it is hoped that progress can be made on addressing these concerns. It's not certain that Austin Energy will support such an MOU. Wren

conditions and also gives customers near instantaneous access to inspection results. Unfortunately, for many inspectors the current wireless arrangement results in numerous "dropped" connections every day. For those inspectors experiencing this problem the procedure for logging back into the system is both cumbersome and time consuming. We have been advised that some of the existing tablet computers (Toughbooks), while several years old, have recently been internally upgraded in an effort to enhance the reliability of the wireless connection. Inspectors using these upgraded field computers have indicated that the upgrades have improved performance.

19. Recommendation: The IT Department should expedite the current process of upgrading existing inspector field computers to enhance in-field communication reliability.

Front Counter

Often customers arriving at the first floor PDRD office are directed to the third floor Inspections Counter in anticipation that that general questions can be answered. The role of the staff assigned to the Inspections Counter frequently involves calling on one of the Inspections Supervisors to come to the counter to respond to the routine question being asked by the customer. Staff interviews suggest that it is rare for a customer to ask a question that demands the knowledge and experience of a supervisor. Having supervisors interrupted to respond to these types of request is not an efficient use of them as a resource. As a minimum, a list of frequently asked questions should be compiled and available to the staff at the counter so they can take a more aggressive role in responding to these routine questions. In the long term these positions should be required to have a minimum level of technical knowledge that would allow them to be more responsive to customer inquiries. The International Code Council (ICC) offers training programs and recognition as a Certified Permit Technician upon passing an exam. Staff with this type of Certification should be expected to provide a greater level of customer service at the counter and also help relieve supervisors from responding to routine counter inquiries. Establishing a minimum requirement of obtaining recognition as a Certified Permit Technician for the Inspections Counter should also trigger consideration for reclassification of the position.

20. Recommendation: Inspections front counter staff should receive training to become Certified Permit Technicians in order to relieve supervisory staff of the burden to respond to the counter to answer routine customer questions.

Inspection Request Process

While we have identified the City's efforts to allow customers to request inspections through Interactive Voice Response (IVR) system or on-line as a positive accomplishment, there are areas where these systems can be further enhanced. Both Inspectors and customers have commented that the IVR system seems to be overly complex and lacking in flexibility. Customers cite examples of the difficulty in

Comment [WC43]: The new systems and computers are better but we still have challenges with connectivity. Inspectors currently cannot complete their work without reliable connectivity. Wren/Roig

Comment [WC44]: The inspections staff is not opposed to this recommendation but really believe that these 2 positions should be reclassified as customer service representatives. The inspections staff wonders whether the need for certified permit technicians would be more applicable to the Permit Center staff. The assistant director will be discussing these ideas with staff managers and supervisors of both divisions. Wren

requesting multiple inspections at a single property. Such requests apparently require the customer to exit the system and re-enter again to request multiple inspections. In addition, contractors complain that it is not easy to gain access to a full description of the corrections that an inspector has entered into the system when they are consist of multiple lines of text. We recognize that programming an IVR system can be complex if numerous restrictions are placed on use, however, the volume of complaints regarding the current system suggest that the City should explore opportunities to further streamline the inspection request process. Our experience has shown that sharing information with other jurisdictions that are also using the same IVR software often leads to ideas for improved performance.

- 21. Recommendation: The existing IVR system should be modified to reduce complexity and add flexibility for customer use.
- 22. Recommendation: The Chief Building Inspector should contact other jurisdictions using the same IVR system to share ideas on improving the customer's experience when using the system.

Inspection Routing and Posting

A common source of frustration expressed by inspectors is the large number of requests they receive from customers throughout the day inquiring about the inspectors anticipated time of arrival. Inspectors state that they must spend a substantial portion of their day responding to these inquiries rather than actually performing inspections. During our staff interviews a number of possible solutions to address this problem were discussed. The elimination of the use of pagers in favor of exclusive use of cell phones would help reduce the steps necessary to get back with the customer but this would only be a partial solution. Ultimately it was suggested that a process be developed to allow each inspector to post his/her inspection schedule directly to the City's website. While not a perfect solution, such a process would provide customers a general idea of the time of the day when they should expect the inspector based on where their project was listed on the inspector's schedule for the day. We believe this additional information would be sufficient for the vast majority of customers. For example, a customer knowing that their project was listed 12th on a list of 15 inspections for the day would suggest the inspection would be in the early afternoon.

23. Recommendation: The Chief Building Inspector should work with the IT staff to allow the inspectors daily schedule to be posted on line for customers to view.

Inspector Cell Phones

Numerous employee surveys and interview responses stated that the City's current policy regarding the use of cell phones as means of communication with inspectors in the field as well as customer's needs to be revised in order to enhance customer service. Currently

Comment [WC45]: Maybe comment should be more direct: For example, the department should explore newer technologies to reduce complexity and add for customer use.

Comment [WC46]: Suggested change: The Chief Building Inspector should research what technologies or IVR systems other jurisdictions are using that would improve the customer's experience.

the City provides individual inspectors with a stipend to assist them in paying for their personal telephones. One of the negative repercussions of this policy is that Inspectors are permitted to not make their cell phone numbers available to the public based on the premise that the phones are the personal property of the individuals. Regardless of the appropriateness of this interpretation, we believe that both customers and Inspectors in the field should have the ability to easily communicate as needed to make the inspection process efficient. The current system relies on customers to contact the inspector through pagers and then necessitates the Inspector to call the individual back when they are available. It is easy to see why this arrangement has led to a high level of dissatisfaction on the part of customers. The inability to reach an inspector was one of the most frequently cited complaints in the customer surveys we collected. Rather than rely on old technology pagers and personally owned cell phones, the City should purchase cell phones for all field inspectors and require them to provide those cell phone numbers to the public so they can be contacted during normal working hours.

- 24. Recommendation: The use of pagers and personal cell phones should be abandoned in favor of City owned cell phones provided to field inspectors
- 25. Recommendation: The cell phone numbers of all phones provided by the City to field inspectors should be available to the public via business cards and web site directories.

Interpretation and Procedures Manuals

The Department has established an extensive list of procedures and interpretations under the heading of Building Criteria Manual. A brief review of the criteria indicates that many subjects are covered in only the broadest terms and would therefore benefit with the addition of more detailed description of the intended procedure to be followed. In addition, some criteria use outdated information (ex: Section 4.8.0 (C) Energy Code Compliance references inspectors certified by the International Conference of Building Officials (ICBO) rather than the current organization of International Code Council (ICC). Staff should review this Manual and sections either updated or deleted as needed to reflect current requirements. In addition, interviews with several staff members indicated that there is a common practice in place for staff to store relevant information on the City's "G" drive. While we support the need to maintain copies of approved policies and procedures, the informal use of the "G" drive to store important information, such as revised procedures staff should be following, invites communication gaps. The information on the "G" drive should be reviewed and documents that should be shared with staff should be identified and subjected to an appropriate internal review process so they can be validated and then placed in a more appropriate location that is indexed and available to all impacted staff (ex: SsharePpoint).

26. Recommendation: The Building Criteria Manual should be carefully reviewed and updated to reflect the Department's current policies and procedures.

Comment [WC47]: This review and the preliminary work to update the BCM are in progress. Wren

27. Recommendation: The Building Official should direct staff to review the contents of the City's internal "G" drive and relocate pertinent documents into the Criteria Manual or other approved locations readily available to staff.

Roll-Over Inspections

A component of maintaining good communication with customers is notifying them when their customer service expectations cannot be met. We believe a lack of timely communication to be a major contributor to the often-cited statement by customers that there is a lack of trust between customers and City staff. An example of failed communication is when an inspector assigned to perform an inspection at a job site fails to notify the customer when he/she is unable to perform the inspection on the day requested. Inspector interviews indicated that they are under no direction to attempt to contact customers to advise them they will not be receiving their inspection on the day requested. It has also been reported that it has not been normal practice to contact other inspectors in the field to request assistance when it is apparent that the inspector will not be able to complete the assigned inspections. Many jurisdictions have established a process that requires that all inspectors "check-in" with their supervisors in the early afternoon to confirm they anticipate being able to complete their assigned inspections. This process helps identify those inspection areas that may need additional inspector assistance and which inspectors may be available to assist. A general statement supporting this concept has been incorporated into the Building Criteria Manual (Section 1.1.4 – Completions in a Timely Manner) but it apparently is not being emphasized by current supervisory staff.

- 28. Recommendation: The Building Official should direct all inspection staff to notify customers when they will not be able to perform the inspection on the date requested.
- 29. Recommendation: The Building Official should direct the Inspections Supervisors to develop and implement a process that allows inspection workload to be redistributed as needed to help ensure all outstanding inspection requests are honored.

F. QUALITY CONTROL

Overview

A review of both the customer supplied comments and employee surveys revealed that there is a significant problem with lack of consistency in the way field inspection staff conducts their inspections. Our experience has indicated this problem arises when there are insufficient resources allocated to the quality control program.

Comment [WC48]: This review and the preliminary work to update the BCM are in progress. Wren

An effective quality control program must include several components. Such a program would include minimum education, experience and certifications, on-going training program, establishing and measuring employee performance standards, a comprehensive auditing program and integrations of audit results into periodic employee performance evaluations. Each of these components will be discussed below along with specific recommendations.

Field Audit Program

Providing a comprehensive on-going training programs and establishing employee performance standards will establish a set of expectations, however, to ensure that a high quality inspection program is actually being achieved in the field it is essential that individual inspector performance be audited in the field. Such a program would consist of periodic inspector/supervisor ride-alongs, supervisors conducting on-site interviews with contractors regarding inspector performance and the mailing of customer comment survey forms to contractors at the conclusion of a project. As mentioned above, these field audits also provide the supervisor the opportunity to identify inconsistencies between inspectors so that those subjects can be addressed during future in-house training sessions.

30. Recommendation: The Building Official should direct the inspections supervisors to implement a comprehensive audit program.

In-House Training

The Department has made a significant commitment to training staff through an annual three (3) day off-site training program presented by national and regional experts. We support such programs but also believe the key to providing uniform and consistent field inspections lies in having a comprehensive on-going in-house training program. Such a program would allow supervisors to provide clear direction to staff regarding how specific sections of the adopted codes should be enforced in the field. Such a program would include a written training schedule to ensure all pertinent subjects were being addressed. Subjects to be included in the program should be a reflection of any inconsistencies observed by the supervisors during field audits. Additionally, an attendance sheet should be kept for each session to confirm all staff has had an opportunity to benefit from the training.

31. Recommendation: A comprehensive on-going in-house training program should be established for each inspection group.

An example of an area that we believe warrants some additional training emphasis is inspection of qualifying historical properties. Customer surveys and comments provided during meetings with neighborhood groups suggest that subject area may not be receiving the attention that the neighborhood residents and business owners believe is needed to ensure their community is properly preserved.

32. Recommendation: The inspector training program should include a program on inspecting properties for historical preservation.

Minimum Employment Qualifications

The key component to providing a quality inspection program begins with the hiring of individuals who meet the minimum experience, education and certification qualifications for the position. A typical way of demonstrating that employees are capable of performing their responsibilities as an inspector is to require the inspector to posses the nationally recognized certifications appropriate to their specific assignment. These certifications are available through a testing process administered by the International Code Council (ICC) and International Association of Plumbing and Mechanical Officials (IAPMO). The State of Texas has also established minimum qualifications for inspectors who inspect electrical or plumbing installations.

The City of Austin has done an excellent job in recording and tracking the certifications obtained by each inspector and has a program in place to ensure that each inspector is knowledgeable of their responsibility to keep those certifications current. Certifications expire unless the individual has accumulated a specified number of Continuing Education Units (CEUs) specific to their certification category. The City should be commended for their practice of reimbursing staff for the cost of obtaining, renewing and attending training in order to retain these certifications.

A reality faced by many jurisdictions, including Austin, is that it is not always possible to attract applicants who possess all of the required certifications prior to appointment. The City therefore has established a probationary period during which a newly hired employee has the opportunity to obtain the required certifications within a specified period of time from their hire date. Staff interviews suggested that the tests to qualify for certification as a State electrical and/or plumbing inspector are very rigorous and extremely difficult to pass unless the candidate has considerable construction experience in the designated field.

It has been our practice to encourage the use of combination residential inspectors as a means of providing greater efficiency in the field. By allowing a single qualified inspector to conduct building, electrical, plumbing and mechanical inspections during a single visit to a site considerable efficiency can be gained. Generally these inspectors have achieved certification as a Residential Combination Inspector through ICC. This option is not currently available to the City of Austin due to the requirement that State Licensed Inspectors qualified in these fields perform all electrical and plumbing inspections. The length of time necessary to obtain the minimum knowledge and experience in the plumbing or electrical field tends to preclude individuals from obtaining the qualifications both fields. Currently the combination residential inspection program for the City of Austin consist of an individual inspector performing building, plumbing and mechanical inspections and an additional electrical inspector be assigned to perform the electrical inspection on the residential work. This type of program has a built-in bias

towards providing a high quality plumbing inspection and, unfortunately, the potential for less attention given to the other trades. Nationally, participants in combination residential inspection programs tend to have strong trade experience in structural framing and then obtain the additional skills in electrical, plumbing and mechanical inspection necessary to pass the Residential Combination Inspector Certification exam. Recently the Department has attempted to address this potential concern by hiring individuals with strong building backgrounds rather than extensive plumbing trade experience. Unfortunately, this has led to a situation where the new employees have been unable to obtain the required State Plumbing Inspector License and therefore must be either reassigned or terminated.

While we agree that the complexity of commercial construction warrants special attention that may only be achievable by inspectors who have significant field experience in the chosen discipline, we believe there should be opportunities to use residential combination inspectors for one and two family dwelling construction.

33. Recommendation: The Department should work with State of Texas to encourage the development of a Residential Combination Inspector Program based solely on ICC Certification as a Residential Combination Inspector.

Comment [WC49]: While we can certainly have these discussions, the City of Austin cannot control how state boards and commissions operate or what they require throughout the State of Texas. Wren